C

Please add new claims 43-60 as follows:

5 ~~45~~. The process according to claims ~~37~~ 1 or ~~42~~ 4 wherein R includes at least one functional groups selected from the group consisting of alcohol, thiol, ketone, aldehyde, ester, ether, amine, imine, amide, nitro, carboxylic acid, disulfide, carbonate, isocyanate, carbodiimide, carboalkoxy, and halogen.

AD

6 ~~44~~. The process according to claims ~~37~~ 1 or ~~42~~ 4 wherein R is selected from a group consisting of

(a) hydrogen;

(b) C_1-C_{20} alkyl;

(c) aryl;

(d) C_1-C_{20} alkyl substituted with one or more groups selected from the group consisting of aryl, halide, hydroxy, C_1-C_{20} alkoxy, and C_2-C_{20} alkoxycarbonyl; and

(e) aryl substituted with one or more groups selected from the group consisting of C_1-C_{20} alkyl, aryl, hydroxyl, C_1-C_5 alkoxy, amino, nitro, and halide.

7 ~~45~~. The process according to any one of claims ~~37~~ 1 or ~~42~~ 4 wherein R is selected from a group consisting of hydrogen, methyl, ethyl, n-butyl, iso-propyl, $-CH_2Cl$, $-CH_2CH_2CH_2OH$, $-CH_2OAc$, unmodified phenyl, and a modified phenyl wherein the phenyl modification is selected from the group consisting of chloride, bromide, iodide, fluoride, $-NO_2$, $-NMe_2$, methoxy, and methyl.

8
~~46.~~ The process according to claim ~~39~~ 3 wherein R^{11} or R^{12} includes at least one functional groups selected from the group consisting of alcohol, thiol, ketone, aldehyde, ester, ether, amine, imine, amide, nitro, carboxylic acid, disulfide, carbonate, isocyanate, carbodiimide, carboalkoxy, and halogen.

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~~47.~~ The process according to claim ~~39~~ 3 wherein R^{11} and R^{12} are each independently selected from a group consisting of

Cont.

(a) hydrogen;

(b) C_1-C_{20} alkyl;

(c) aryl;

(d) C_1-C_{20} alkyl substituted with one or more groups selected from the group consisting of aryl, halide, hydroxy, C_1-C_{20} alkoxy, and C_2-C_{20} alkoxycarbonyl; and

(e) aryl substituted with one or more groups selected from the group consisting of C_1-C_{20} alkyl, aryl, hydroxyl, C_1-C_5 alkoxy, amino, nitro, and halide.

10
~~48.~~ The process according to claim ~~39~~ 3 wherein R^{11} and R^{12} are each independently selected from a group consisting of hydrogen, methyl, ethyl, n-butyl, iso-propyl, $-CH_2Cl$, $-CH_2CH_2CH_2OH$, $-CH_2OAc$, unmodified phenyl, and a modified phenyl wherein the phenyl modification is selected from the group consisting of chloride, bromide, iodide, fluoride, $-NO_2$, $-NMe_2$, methoxy, and methyl.

11 1 3
~~49.~~ The process according to claims ~~37~~ or ~~39~~ wherein L and L^1 are each a phosphine of the formula $PR^3R^4R^5$, wherein R^3 is selected from the group consisting of secondary alkyl and cycloalkyl, and R^4 and R^5 are each independently selected from the group consisting of aryl, C_1-C_{10} primary alkyl, secondary alkyl, and cycloalkyl.

12 1 3
~~50.~~ The process according to claims ~~37~~ or ~~39~~ wherein L and L^1 are each independently selected from the group consisting of -P(cyclohexyl)$_3$, -P(cyclopentyl)$_3$, -P(isopropyl)$_3$, and -P(phenyl)$_3$.

13 4
~~51.~~ The process according to claim ~~42~~ wherein L, L^1, and L^2 are each a phosphine of the formula $PR^3R^4R^5$, wherein R^3 is selected from the group consisting of secondary alkyl and cycloalkyl, and R^4 and R^5 are each independently selected from the group consisting of aryl, C_1-C_{10} primary alkyl, secondary alkyl, and cycloalkyl.

14 4
~~52.~~ The process according to claim ~~42~~ wherein L, L^1, and L^2 are each independently selected from the group consisting of -P(cyclohexyl)$_3$, -P(cyclopentyl)$_3$, -P(isopropyl)$_3$, and -P(phenyl)$_3$.

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~~58.~~ The process according to any one of claims ~~37~~ 1, ~~39~~ 3, and ~~42~~ 4 wherein X and X^1 are independently selected from the group consisting of hydrogen, halogen, unsubstituted moiety, and substituted moiety wherein the moiety is selected from a group consisting of C_1-C_{20} alkyl, aryl, C_1-C_{20} alkoxide, aryloxide, C_3-C_{20} alkyldiketonate, aryldiketonate, C_1-C_{20} carboxylate, arylsulfonate, C_1-C_{20} alkylsulfonate, C_1-C_{20} alkylthio, C_1-C_{20} alkylsulfonyl, and C_1-C_{20} alkylsulfinyl, and wherein the moiety substitution is selected from a group consisting of C_1-C_5 alkyl, halogen, C_1-C_5 alkoxy, unmodified phenyl, halogen substituted phenyl, C_1-C_5 alkyl substituted phenyl, and C_1-C_5 alkoxy substituted phenyl.

12
Cont.

16
~~54.~~ The process according to any one of claims ~~37~~ 1, ~~39~~ 3, and ~~42~~ 4 wherein compound according to claim 13, wherein X and X^1 are independently selected from chloride, bromide, iodide, unsubstituted moiety, and substituted moiety wherein the moiety is selected from a group consisting of benzoate, C_1-C_5 carboxylate, C_1-C_5 alkyl, phenoxy, C_1-C_5 alkoxy, C_1-C_5 alkylthio, arylsulfonate, and C_1-C_5 alkyl sulfonate, and the moiety substitution is selected from a group consisting of C_1-C_5 alkyl, unmodified phenyl, halogen substituted phenyl, C_1-C_5 alkyl substituted phenyl, and C_1-C_5 alkoxy substituted phenyl.

17
~~55.~~ The process according to any one of claims ~~37~~ 1, ~~39~~ 3, and ~~42~~ 4 wherein X and X^1 are independently selected from the group consisting of chloride, CF_3CO_2, CH_3CO_2, CFH_2CO_2, $(CH_3)_3CO$, $(CF_3)_2(CH_3)CO$, $(CF_3)(CH_3)_2CO$, PhO, MeO, EtO, tosylate, mesylate, and trifluoromethanesulfonate.

18 2
~~56.~~ A process according to claim ~~38~~ wherein R and R^1 are each independently selected from the group consisting of

(a) hydrogen;

(b) C_1-C_4 alkyl;

(c) phenyl;

(d) C_1-C_4 alkyl substituted with one or more functional groups selected from the group consisting of halide, hydroxy, and C_2-C_5 alkoxycarbonyl; and

(e) phenyl substituted with one or more functional groups selected from the group consisting of C_1-C_5 alkyl, C_1-C_5 alkoxy, amino, nitro, and halide;

A2 Cont.

X and X^1 are each independently selected from the group consisting of Cl, CF_3CO_2, CH_3CO_2, CFH_2CO_2, $(CH_3)_3CO$, $(CF_3)_2(CH_3)CO$, $(CF_3)(CH_3)_2CO$, PhO, MeO, EtO, tosylate, mesylate, and trifluoromethanesulfonate; and,

L and L^1 are each independently selected from the group consisting of -P(phenyl)3, -P(cyclohexyl)$_3$, -P(cyclopentyl)$_3$, and -P(isopropyl)$_3$.

19 18
~~57.~~ The process according to claim ~~56~~ wherein

R^1 is hydrogen;

R is phenyl or a phenyl substituted at the para position with a moiety selected from a group consisting of C_1-C_5 alkyl, C_1-C_5 alkoxy, amino, nitro, and halide;

X and X^1 are both Cl; and

L and L^1 are both -P(cyclohexyl)$_3$.

20
~~58.~~ The process according to claim ~~39~~ 3 wherein

R, R^{11}, and R_{12} are each independently selected from a group consisting of

(a) hydrogen;

(b) C_1-C_4 alkyl;

(c) phenyl;

(d) C_1-C_4 alkyl substituted with one or more functional groups selected from the group consisting of halide, hydroxy, and C_2-C_5 alkoxycarbonyl; and

(e) phenyl substituted with one or more functional groups selected from the group consisting of C_1-C_5 alkyl, C_1-C_5 alkoxy, amino, nitro, and halide;

X and X^1 are each independently selected from the group consisting of Cl, CF_3CO_2, CH_3CO_2, CFH_2CO_2, $(CH_3)_3CO$, $(CF_3)_2(CH_3)CO$, $(CF_3)(CH_3)_2CO$, PhO, MeO, EtO, tosylate, mesylate, and trifluoromethanesulfonate; and,

L and L^1 are each independently selected from the group consisting of -P(phenyl)3, -P(cyclohexyl)$_3$, -P(cyclopentyl)$_3$, and -P(isopropyl)$_3$.

21
~~59.~~ A process according to claim ~~42~~ 4 wherein R and R^1 is selected from the group consisting of

(a) hydrogen;

(b) C_1-C_4 alkyl;

(c) phenyl;

(d) C_1-C_4 alkyl substituted with one or more functional groups selected from the group consisting of halide, hydroxy, and C_2-C_5 alkoxycarbonyl; and

(e) phenyl substituted with one or more functional groups selected from the group consisting of C_1-C_5 alkyl, C_1-C_5 alkoxy, amino, nitro, and halide;

X and X^1 are each independently selected from the group consisting of Cl, CF_3CO_2, CH_3CO_2, CFH_2CO_2, $(CH_3)_3CO$, $(CF_3)_2(CH_3)CO$, $(CF_3)(CH_3)_2CO$, PhO, MeO, EtO, tosylate, mesylate, and trifluoromethanesulfonate; and,

L, L^1, and L^2 are each independently selected from the group consisting of -P(phenyl)3, -P(cyclohexyl)$_3$, -P(cyclopentyl)$_3$, and -P(isopropyl)$_3$.

22 60. The process according to claim 21 wherein

R^1 is hydrogen;

R is phenyl or a phenyl substituted at the para position with a moiety selected from a group consisting of C_1-C_5 alkyl, C_1-C_5 alkoxy, amino, nitro, and halide;

X and X^1 are both Cl; and

L^2 is -P(cyclohexyl)$_3$.--

REMARKS

The present invention relates to ruthenium and osmium metathesis catalysts. Claims 1-42 were originally filed with the application. Claims 37 and 38 have been allowed.

As part of this response, claim 38 has been amended as to matters of form and new claims 43-60 have been added.